

Work Order ID 60904

August 3, 2010 9:55:58 AM

Page 1

Item ID: D2933-1

Accept

Setup Start

Stop

Revision ID:

Item Name: Saddle LH In, 206

Start Date: 8/02/10 Start Qty: 4.00

Required Date: 8/06/10 Req'd Qty: 4.00

Cust Item ID:

Customer:

Reference:

Run Start

Stop

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2933

Rev C

100



HAAS 1

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

0.00

0.00

L.A 10/08/01

4

0

Memo

Program part number and batch number. ☐ 1-Inspect part number and batch number are programmed correctly. ☐ 2-Machine Step No 1 of Folio and visually inspect as per dwg D2933 & attached Dimension Sheet ☐ 3-Machine Step No 2 of Folio and visually inspect as per

110



Mill Conv

Conventional Milling Machine

CONVENTIONAL MILLING MACHINE

0.00

0.00

S.F 10/08/05

4

0

Memo

Machine Keyway and inspect per attached dimension sheet

120



QC

Quality Control

QC1- Inspect dimensions to dimension sheet

0.00

0.00

L.A 10/08/01

4

0

Memo

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60904

August 3, 2010 9:55:58 AM

Page 2

Item ID: D2933-1

Accept

Setup Start

Revision ID:

Stop

Item Name: Saddle LH In, 206

Start Date: 8/02/10

Start Qty: 4.00

Cust Item ID:

Required Date: 8/06/10

Req'd Qty: 4.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00

QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

HandFinish

Memo

0.00

Hand Finishing

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Powdercoat

Memo

0.00

Powder Coating

START TIME:

1:00pm

OVEN TEMPERATURE:

1:30pm FINISH TIME:

320°F

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60904

Page 3

August 3, 2010 9:55:59 AM

Item ID: D2933-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle LH In, 206

Start Date: 8/02/10

Start Qty: 4.00



Cust Item ID:

Required Date: 8/06/10

Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160



QC3- Inspect Part Finish

0.00

QC

Memo

0.00

Quality Control

ml 10 08 10 (4)

170



Identify as per dwg & Stock Location: 428

0.00

Packaging

Memo

0.00

Packaging

10/8/10 SA (40)

180



QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

10/08/11 MF
10-8-11

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

August 3, 2010 9:55:57 AM

Page 1

Work Order ID: 60904



Parent Item: D2933-1



Parent Item Name: Saddle LH In, 206

Start Date: 8/02/10

Required Date: 8/06/10

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP: B 00.06.26 New DWG rev (mpp 2069) EC
IPP Rev: C As per Rev C 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	----------------	--------------	---------------	----------------	--------

D6101-001

Manufactured

No

100

Each

57.0000

1

4



Saddle Billet

Location

Loc Qty

Loc Code

MAT

40

46409

40

MAT40

17

46409

17

4.000

G.A 10/08/01

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD				Work Order:	109034
Description: 206 Saddle, Inboard, Left side				Part Number:	D2933-1
Inspection Dwg: D2933 Rev: C DSK: Rev:				Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	0.100	0.140		0.126	0.126	0.126	0.126	Depth mic / 118-120
B	0.100	0.140		0.126	0.126	0.126	0.126	" "
C	0.100	0.140		0.116	0.116	0.115	0.116	" "
D	0.210	0.230		0.223	0.223	0.223	0.223	" "
E	1.245	1.255		1.250	1.250	1.250	1.250	vern / 6A-01
F	1.245	1.255		1.250	1.250	1.250	1.250	" "
G	2.495	2.505		2.500	2.500	2.500	2.500	" "
H	0.510	0.515		.510	.510	.510	.510	" "
I	1.572	1.582		1.577	1.577	1.577	1.577	" "
J	2.495	2.505		2.500	2.500	2.500	2.500	" "
K	0.257	0.262		0.259	0.259	0.259	0.259	" "
L	0.312	0.317		0.314	0.314	0.314	0.314	" "
M	0.235	0.240		.239	.239	.239	.239	" "
N	0.100	0.140		0.106	0.110	0.110	0.110	mic / 6A-03
O	0.540	0.560		0.550	0.550	0.550	0.550	vern / 6A-01
P	0.490	0.510		0.500	0.500	0.500	0.500	" "
Q	3.715	3.725		3.720	3.720	3.720	3.720	" "
R	2.470	2.510		2.495	2.495	2.495	2.495	" "
S	0.240	0.270		0.251	0.251	0.251	0.251	" "
T	0.100	0.180		0.130	0.130	0.130	0.130	" "
U	1.625	1.635		1.630	1.630	1.630	1.630	" "
V	1.362	1.372		1.367	1.367	1.367	1.367	" "
W	0.316	0.321		0.316	0.316	0.316	0.316	" "
X	1.125	1.145		1.136	1.141	1.135	1.135	HAAS 3 / Dial indicator
Y	1.565	1.585		1.576	1.581	1.575	1.575	HAAS 3 / Dial indicator
Z	0.178	0.198		0.188	0.188	0.188	0.188	Rad gage
AA								" "
AB								" "
AC								" "
AD								" "
AE								" "

Accept/Reject

Measured by: B.A. / S.F.

Date: 10/08/01 / 10/08/01

Audited by: [Signature]

Date: 10.8.9

Prototype Approval: N/A

Date: N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



NOTES:

- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)
(MAKE FROM D6101-001 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP



C	06.11.09	R0.188 WAS R0.30, TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.10.29	NEW ISSUE
DESIGN	DRAWN BY CB	DART DART AEROSPACE, USA, INC. BELLINGHAM, WA
CHECKED PH	APPROVED #	DRAWING NO. D2933 REV. C SHEET 1 OF 2
DATE 06.11.09	TITLE SADDLE INSIDE 2:	

COPYRIGHT © 1999 BY DWT AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL
AND IS SUPPLIED ON THE EXPRESS CONDITION
THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries